

SE 350
P1 Group 6
January 30, 2014

Lessons Learned

The code that was supplied for part one was enough to guide us in the right direction for our operating system. Most of our problems came from bugs in our program rather than conceptual errors. We had a large problem with pointer arithmetic, which resulting in allocating a lot more memory than intended on our heap. Eventually we realized how C handled pointer arithmetic and were able to solve our problem. We also faced an issue where our program would hard fault and we couldn't find out why. After much debugging we realized that our process was just putting too many variables on the stack and was resulting in stack overflow. Luckily the debugger is actually pretty good and made it doable for us to find these problems.

At first we had a lot of trouble recognizing how the request memory function actually worked (based on the tutorial slide pseudo code). It took us awhile to realize how the OS would switch context while waiting for a memory block and then return to that same place once a block became free. Overall it was a long hard assignment but very rewarding!